

Remarks

Reconsideration and reexamination of the above-identified patent application, as amended, are respectfully requested. Claims 1-13 are pending in this application upon entry of this Amendment. By this Amendment, Applicants have amended paragraph [0031] of the Specification for consistency. Support for the amendment of paragraph [0031] can be found, for example, in Fig. 3.

In addition, Applicants have amended independent claims 1 and 5, and added dependent claim 13. Support for the amendments of claim 1 and 5 can be found, for example, in the Specification at [0029] and [0041], in Fig. 2 and Fig. 8, and in claim 9 as originally filed. Support for new claim 13 can be found, for example, in the Specification at [0042], ll. 1-5. No claims have been cancelled in this Amendment. Of the pending claims, claims 1, 5, and 9 are the only independent claims.

In the Office Action mailed December 16, 2004, the Examiner rejected claims 1-12 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,970,400 issued to Dwyer (hereinafter Dwyer) in view of U.S. Patent Pub. 2002/0094797 to Marshall et al. (hereinafter Marshall). Applicants respectfully request reconsideration on light of the following remarks.

Independent claim 9 provides an automotive communication system for communicating information between a plurality of automotive vehicles. The communication system comprises at least one scatternet. Each scatternet comprises a plurality of piconets. Each piconet comprises at least one vehicle. Each vehicle in the automotive communication system comprises a frequency hopping spread spectrum (FHSS) transceiver. The FHSS transceiver receives a synchronizing pulse per second (PPS) signal derived from a global positioning system. Each FHSS transceiver in the automotive communication system is synchronized with every other FHSS transceiver in the automotive communication system by the PPS signal.

Dwyer discloses a communication system for increasing communication range between two devices, as described in the Abstract.

A communication system is provided for increasing communication range between at least two radio communication devices without increasing the output power of transmitted radio signals from the devices, and without increasing the antenna gain of the received signals. Each radio device includes an oscillator for generating a carrier reference signal, and an SATPS receiver which receives at least one standard timing reference signal from at least one SATPS satellite. The received standard timing reference signal is used to continuously adjust the timing and synchronization of the oscillator to improve the accuracy of the carrier frequency signal. The improved accuracy in the carrier frequency signal may then be used to reduce the bandwidth of the modulated carrier frequency signals generated by the radio device to thereby increase the effective communication range and sensitivity of the device.

Marshall discloses a communication system using two modes of transmission to enable an unsynchronized receiver to establish communication in a short time, as described in the Abstract.

A communications system comprises a beacon and at least one portable device for receiving data from the beacon. The beacon broadcasts messages using a first protocol which provides a series of inquiry messages which hop frequencies (such as Bluetooth). Additional data is broadcast using a spread spectrum transmission technique. These two modes enable the spread spectrum transmission technique to be used to enable an unsynchronized receiver to establish communication in a short time, so that data can be sent to the receiver as quickly as possible. The frequency

hopping technique may require a longer call set-up procedure, but provides a more appropriate communications protocol for bi-directional transfer of larger quantities of data.

The Examiner rejected claim 9 as an obvious combination of Dwyer and Marshall. In particular, the Examiner asserts:

[I]t would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Marshall's teachings in forming a plurality of piconets (devices belonging to a piconet are inherently synchronized with each other) between the plurality of communication systems configured with Bluetooth transceivers (the communication system can participating (sic) in different piconets) for the advantage of sharing information between communication systems that are within range. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the communication system in automotive vehicle for the advantage of expanding the application of the system to various types of equipment.

However, neither Dwyer nor Marshall disclose a scatternet wherein each FHSS transceiver is synchronized with every other transceiver by a PPS signal. In particular, both Dwyer and Marshall fail to make any disclosure regarding a scatternet. Furthermore, one skilled in the art would understand scatternet to signify a "group of independent and **non-synchronized** piconets that share at least one common Bluetooth device." (Webopedia Computer Dictionary, Webopedia at <http://www.webopedia.com/TERM/S/scatternet.html> (last visited Feb. 7, 2005)).

In contrast, the present invention provides a scatternet interconnecting a plurality of FHSS transceivers arranged as piconets ([0029], ll. 3-4, and Fig. 2). Furthermore, the present invention teaches the synchronization of transceivers belonging to different piconets

such that a device in a first piconet may communicate with a device in a second piconet without the need for substantial synchronization time ([0041], and Fig. 8).

Accordingly, neither Dwyer nor Marshall teach or suggest a scatternet wherein each FHSS transceiver of a first piconet is synchronized with every other transceiver of a second piconet by a PPS signal. Because Dwyer and Marshall fail to teach or suggest all claim limitations, the Examiner has failed to establish a *prima facie* case of obviousness against claim 9 and the rejection should be withdrawn.

The Examiner used the same construction to reject independent claims 1 and 5 that the Examiner used in rejecting independent claim 9. Although these claims have different scope, the same arguments used in claim 9 apply to claims 1 and 5, as amended, and the rejection of the claims should be withdrawn.

Accordingly, Applicants believe that the independent claims 1, 5, and 9 are patentable, as amended, under 35 U.S.C. § 103(a) over Dwyer and Marshall. Claims 2-4, 6-8, and 10-13 depend from independent claims 1, 5, and 9, respectively, and include the limitations therein. Moreover, these claims recite further limitations, in addition to the limitations of independent claims 1, 5, and 9, which render these claims additionally patentable. Therefore, the Applicants respectfully request consideration of claim 13, and reconsideration and withdraw of the rejection to claims 1-12 under 35 U.S.C. § 103(a).

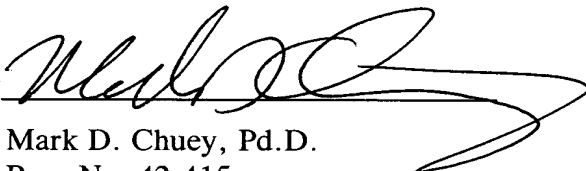
CONCLUSION

In summary, claims 1-13, as amended, meet the substantive requirements for patentability. The case is in appropriate condition for allowance. Accordingly, such action is respectfully requested.

If a telephone or video conference would expedite allowance or resolve any further questions, such a conference is invited at the convenience of the Examiner.

Respectfully submitted,

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